

FIG.1

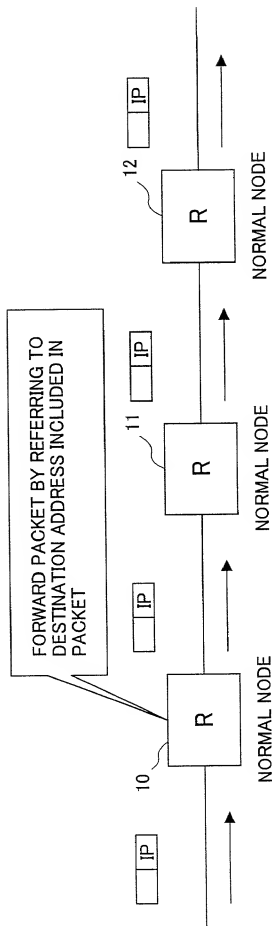


FIG. 2

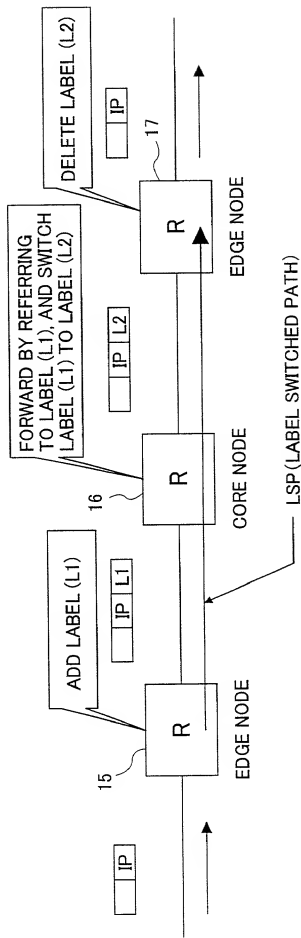


FIG.3

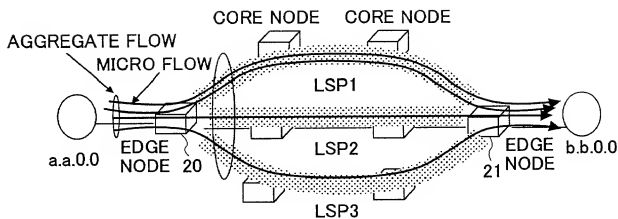


FIG.4

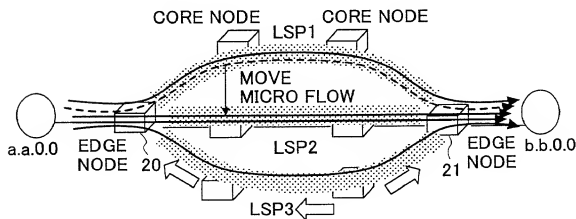


FIG.5A

FIG.5B

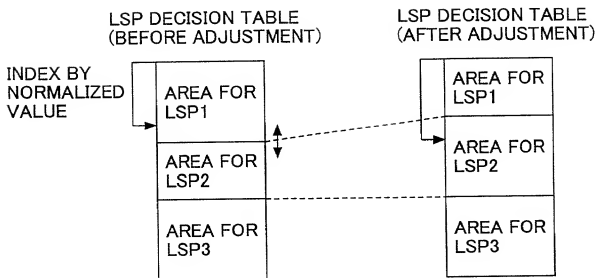


FIG. 6

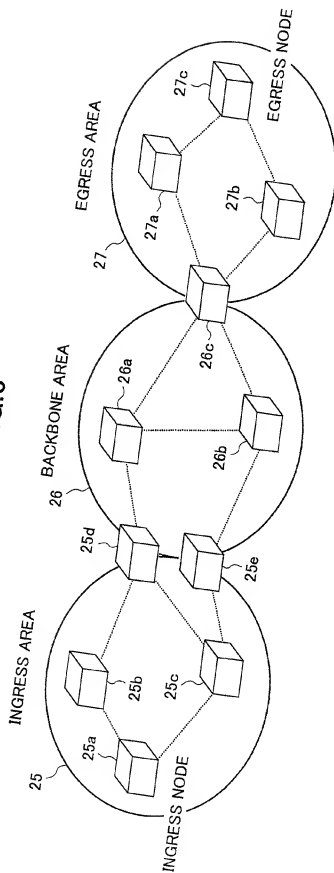


FIG.7

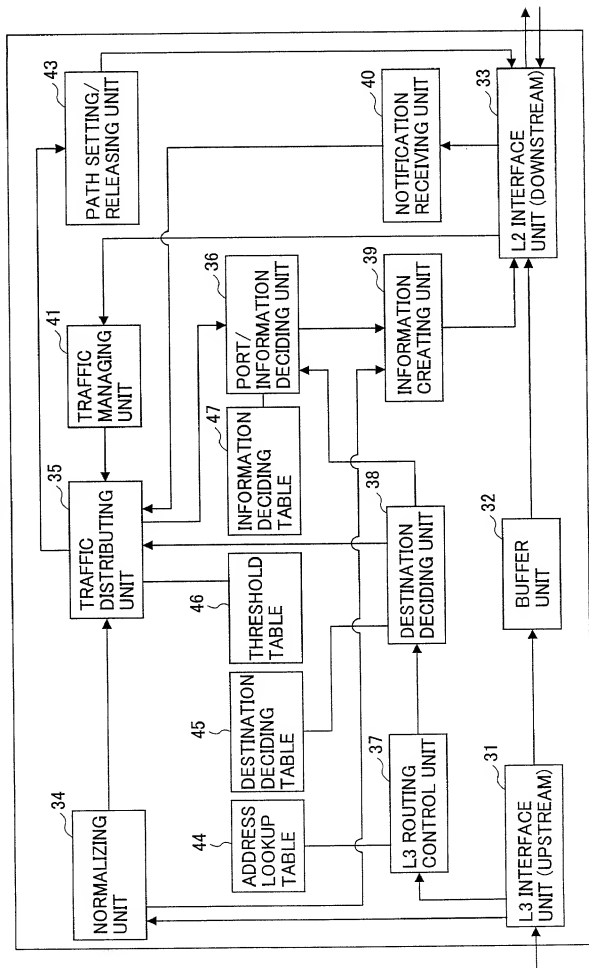


FIG. 8

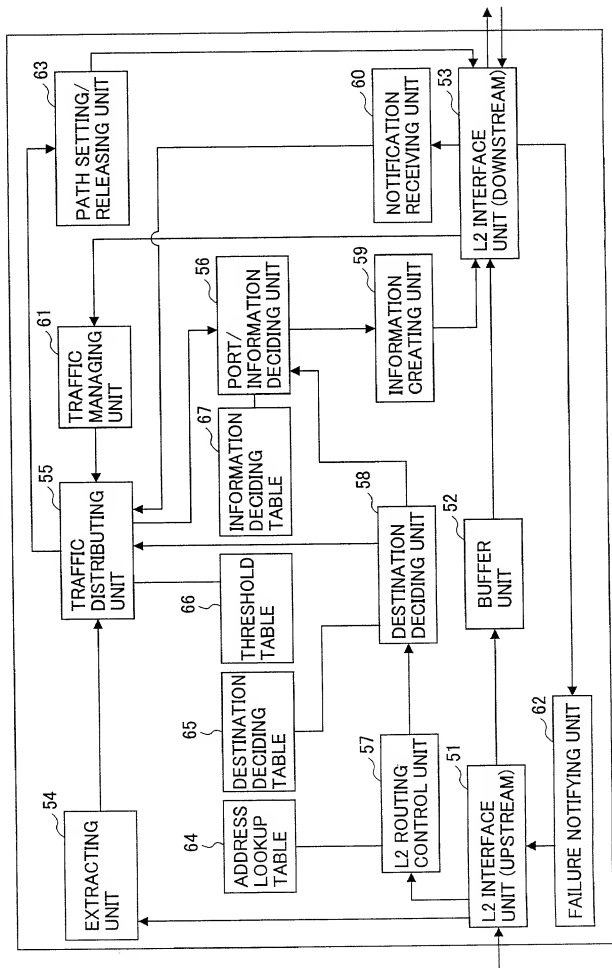


FIG.9

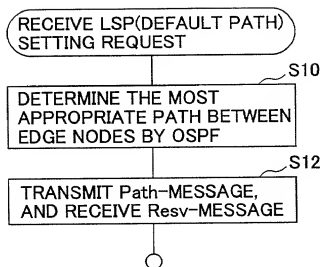


FIG. 10

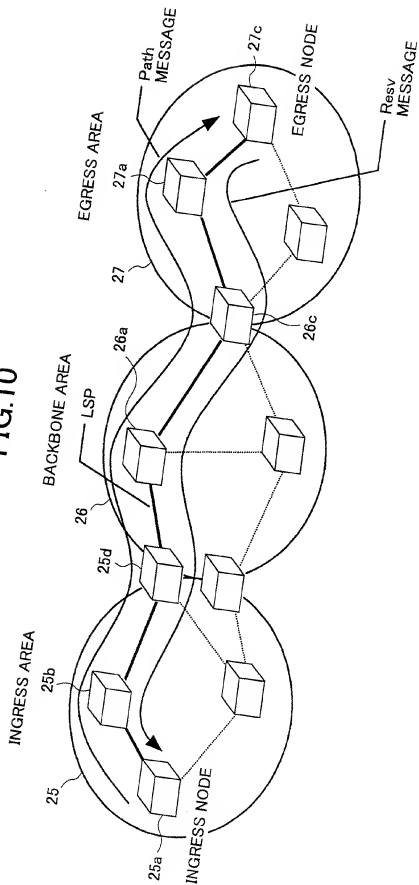


FIG.11

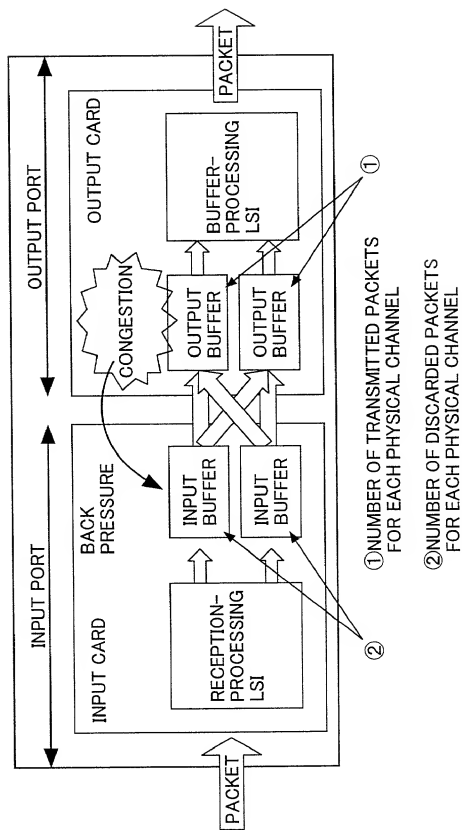


FIG.13

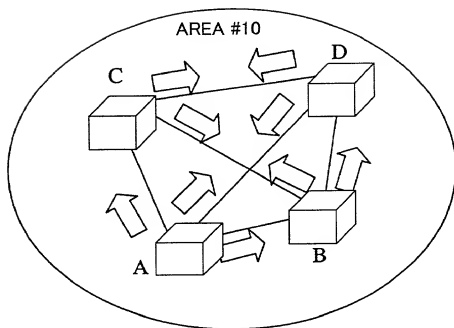


FIG.14

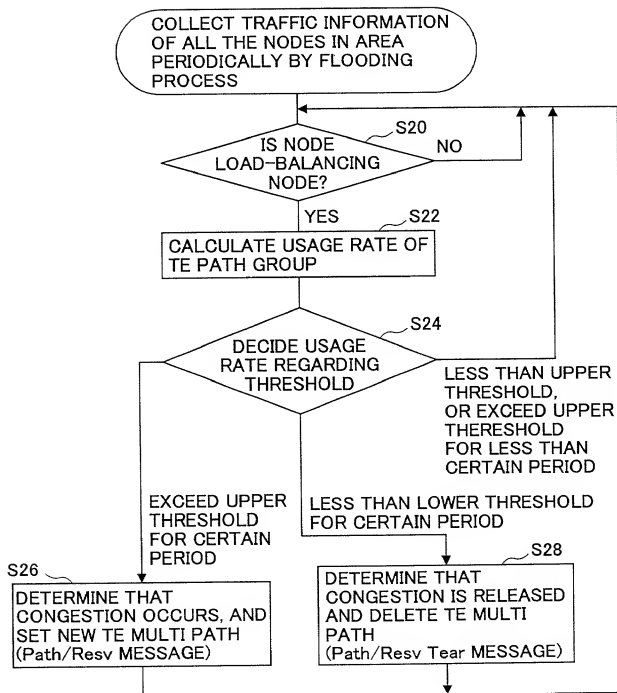


FIG.15

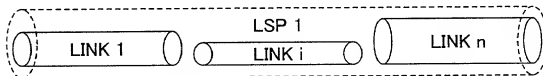
COLLECT TRAFFIC INFORMATION AT EACH NODE (PACKET TRANSMITTING AMOUNT, PACKET DISCARDING AMOUNT, TE BANDWIDTH)



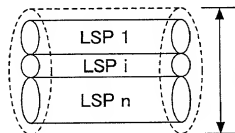
①OBTAIN AND SMOOTH PACKET TRANSMITTING AMOUNT AND PACKET DISCARDING AMOUNT AT EACH NODE, THEN, OBTAIN TRAFFIC INFORMATION OF EACH LINK



②CALCULATE EFFECTIVE LOAD ON LSP, BASED ON TRAFFIC INFORMATION OF EACH LINK (CHANNEL)



③CALCULATE USAGE RATE OF TE PATH GROUP, BASED ON EFFECTIVE LOAD ON EACH LSP



CALCULATE USAGE RATE BY ASSUMING ALL THE LSPS AS SINGLE PIPE



④DETERMINE WHETHER TE PATH GROUP IS CONGESTED, BASED ON USAGE RATE OF TE PATH GROUP

FIG.16

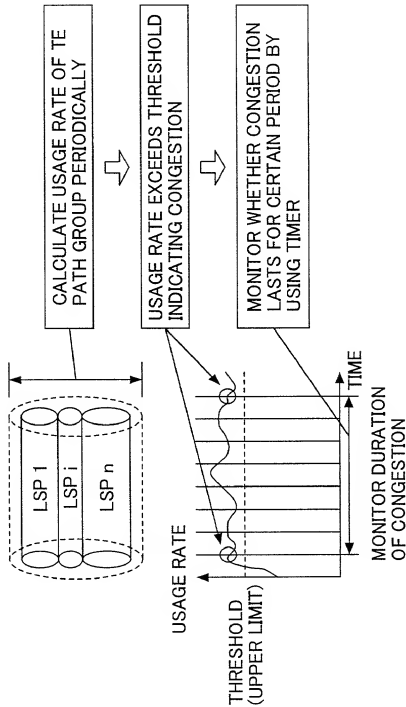


FIG.17

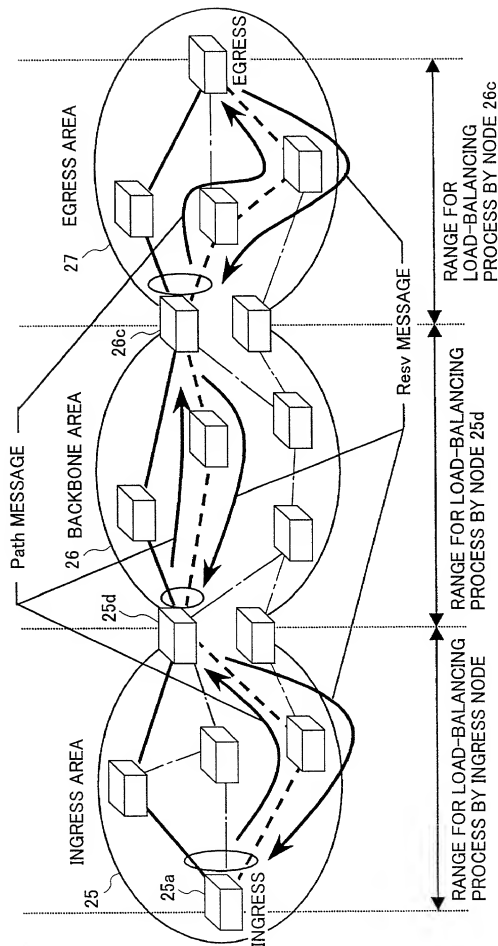


FIG.18

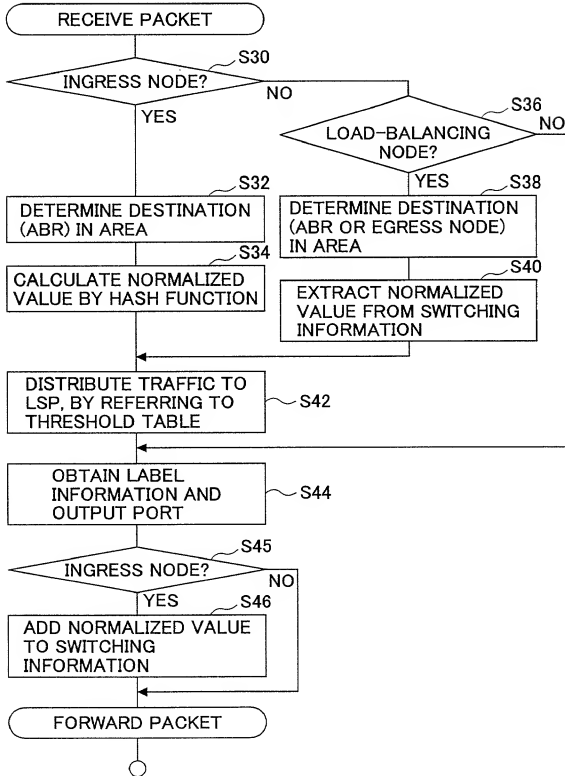


FIG.19

IP SOURCE ADDRESS	IP DESTINATION ADDRESS	ASSOCIATE POINTER

FIG.20

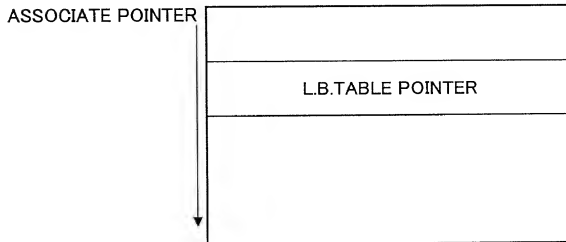


FIG.21

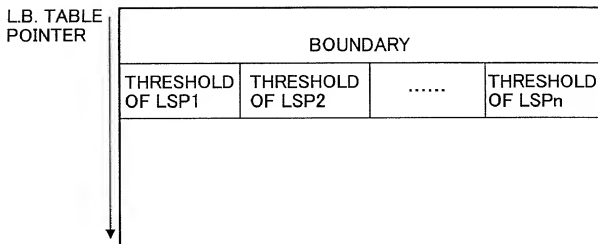


FIG.22

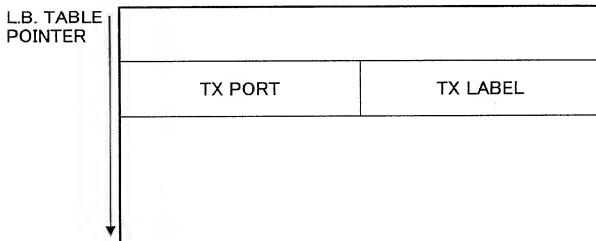


FIG. 23A

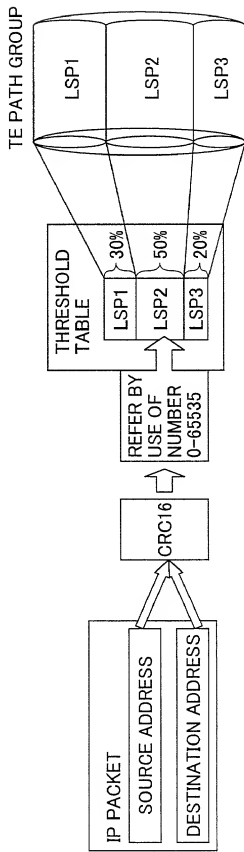


FIG.23B

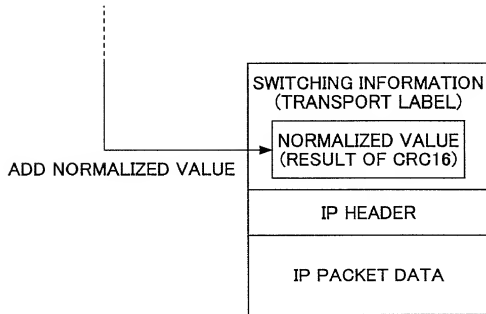


FIG.23C

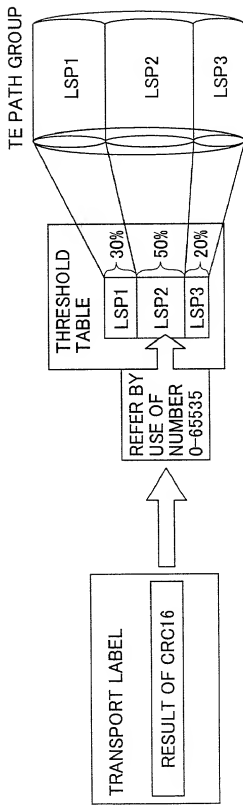


FIG. 24

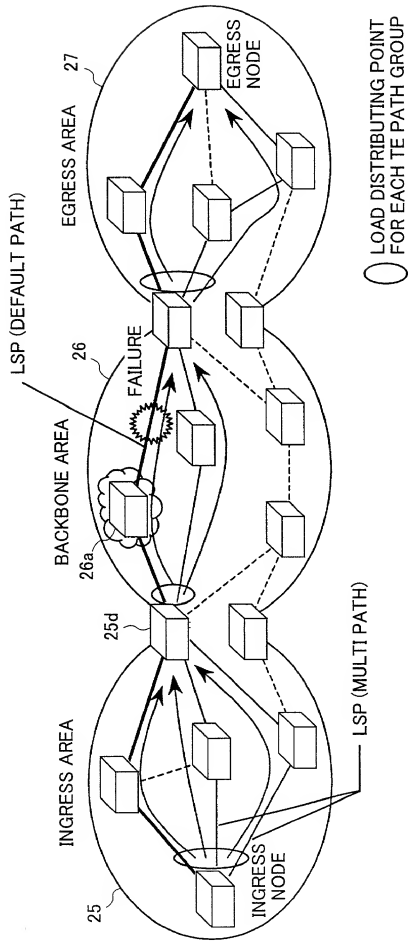


FIG.25

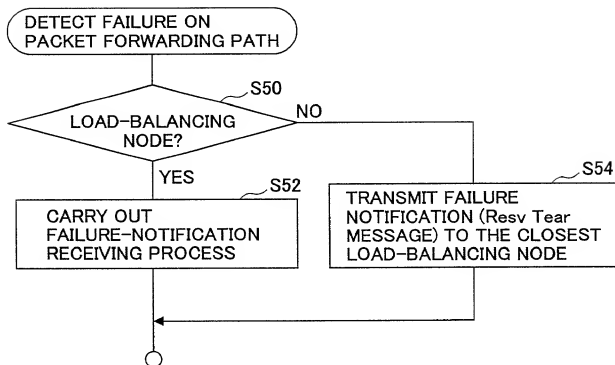


FIG.26

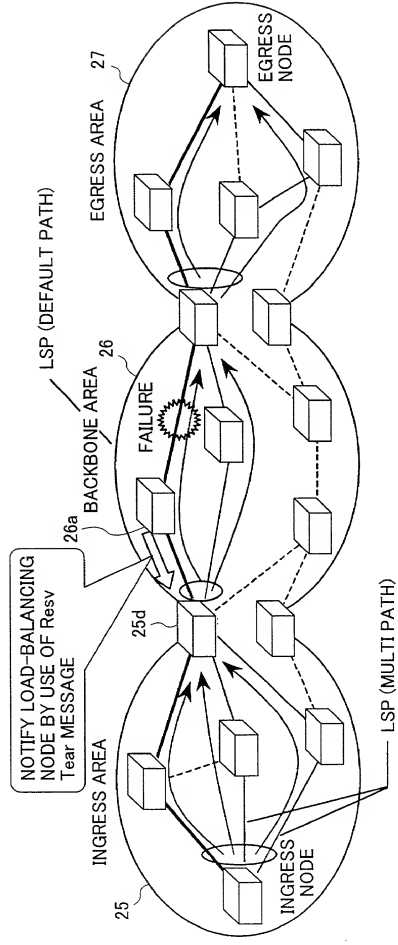
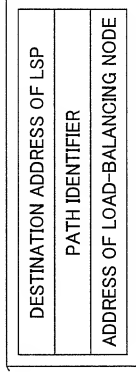
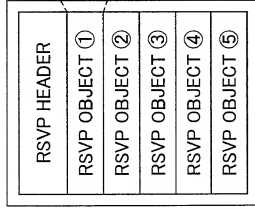


FIG.27

RSVP-LSP-TUNNEL
PATH MESSAGE



RSVP OBJECT ① (SESSION OBJECT)

FIG. 28

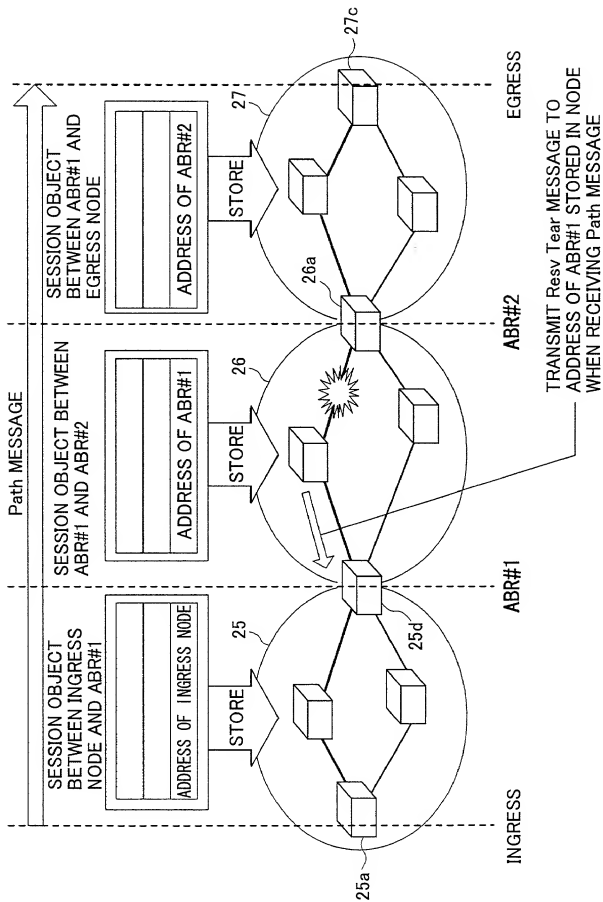


FIG.29

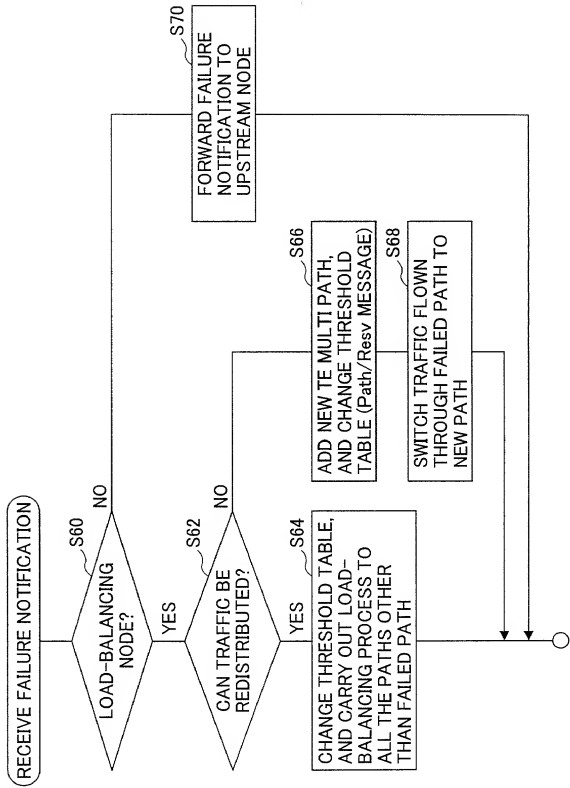
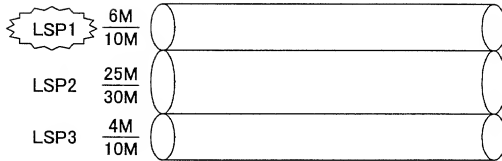
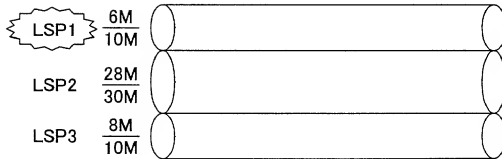


FIG.30A



TOTAL AVAILABLE BANDWIDTH - AVAILABLE BANDWIDTH OF LSP1 = $15M - 4M = 11M$, WHICH IS GREATER THAN EFFECTIVE LOAD (6M) ON LSP1. TRAFFIC CAN BE REDISTRIBUTED WITHOUT LOSS.

FIG.30B



TOTAL AVAILABLE BANDWIDTH - AVAILABLE BANDWIDTH OF LSP1 = $8M - 4M = 4M$, WHICH IS GREATER THAN EFFECTIVE LOAD (6M) ON LSP1. TRAFFIC CAN BE REDISTRIBUTED WITHOUT LOSS.

FIG.31A

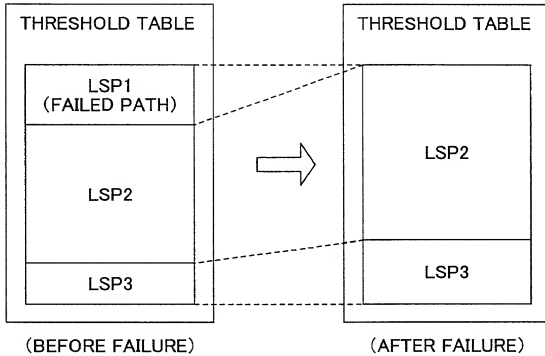


FIG.31B

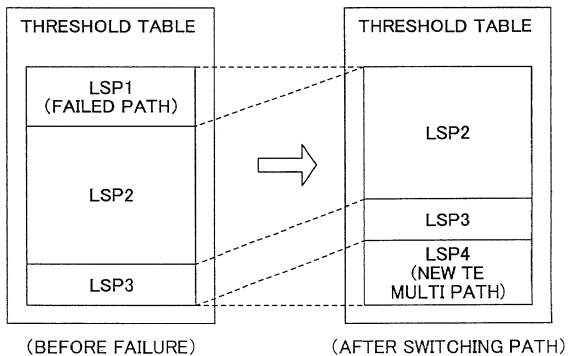


FIG. 32A

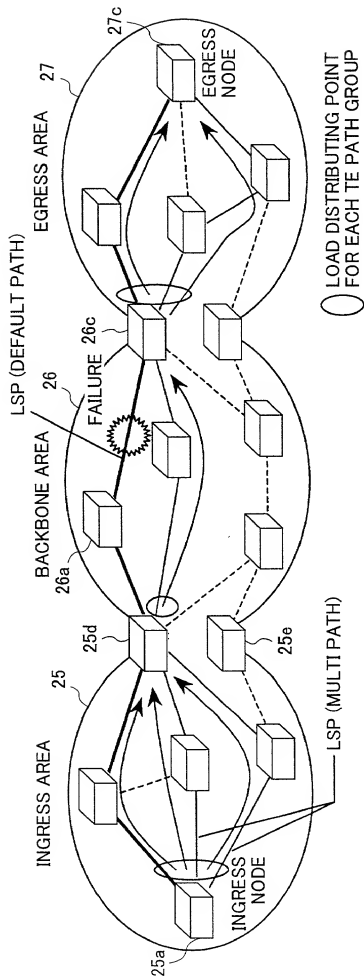


FIG.32B

